

FIG. 1

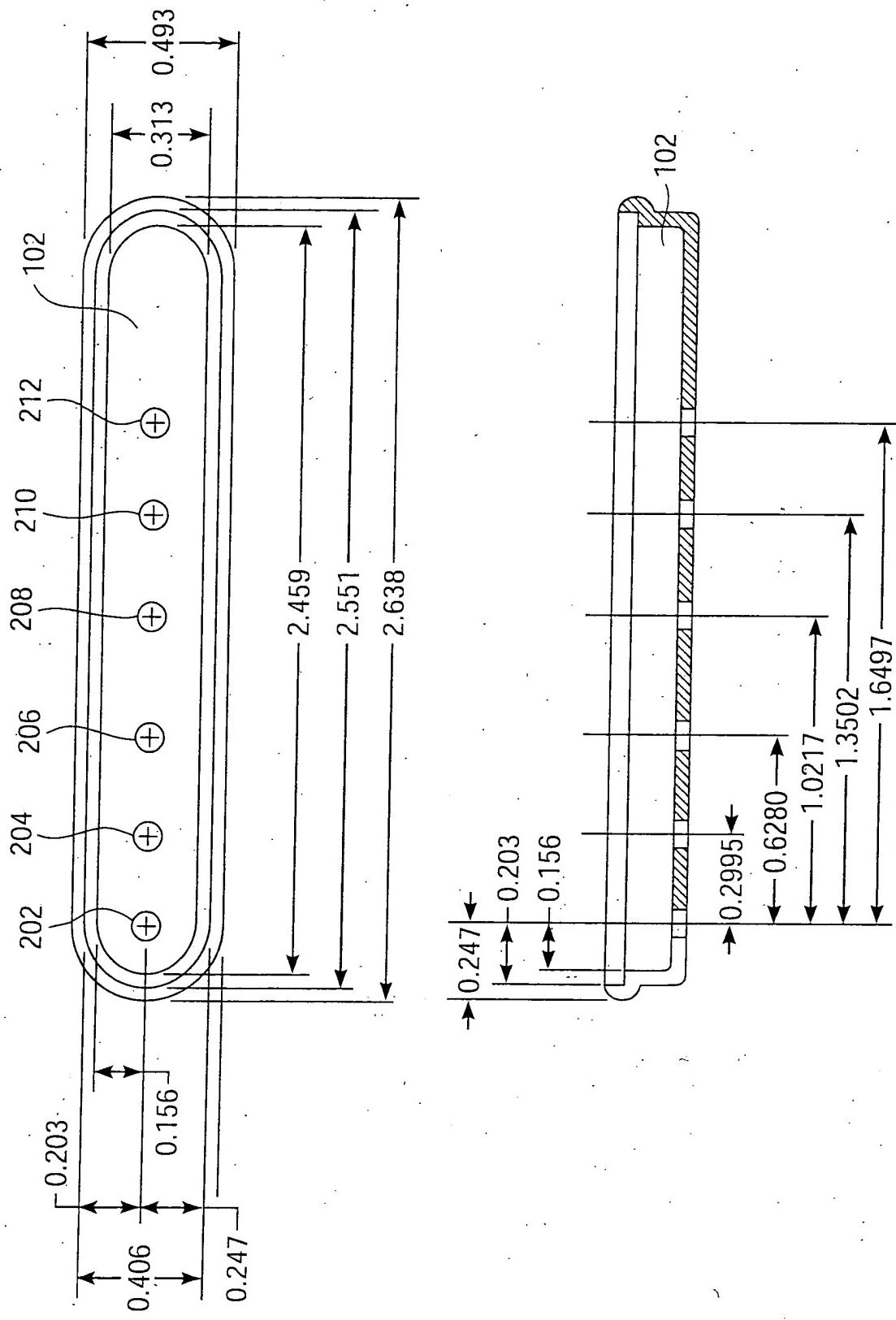


FIG. 2

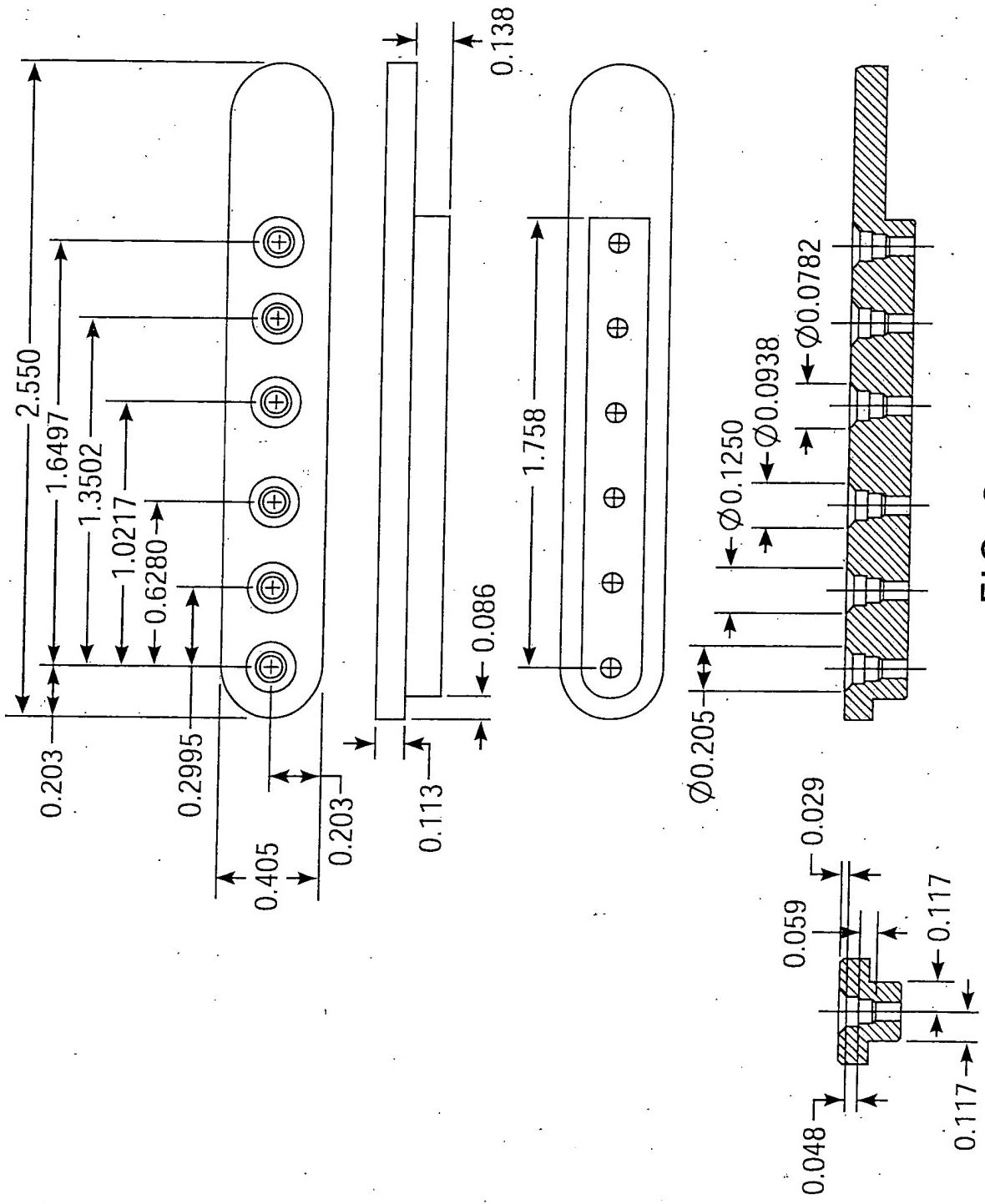


FIG. 3

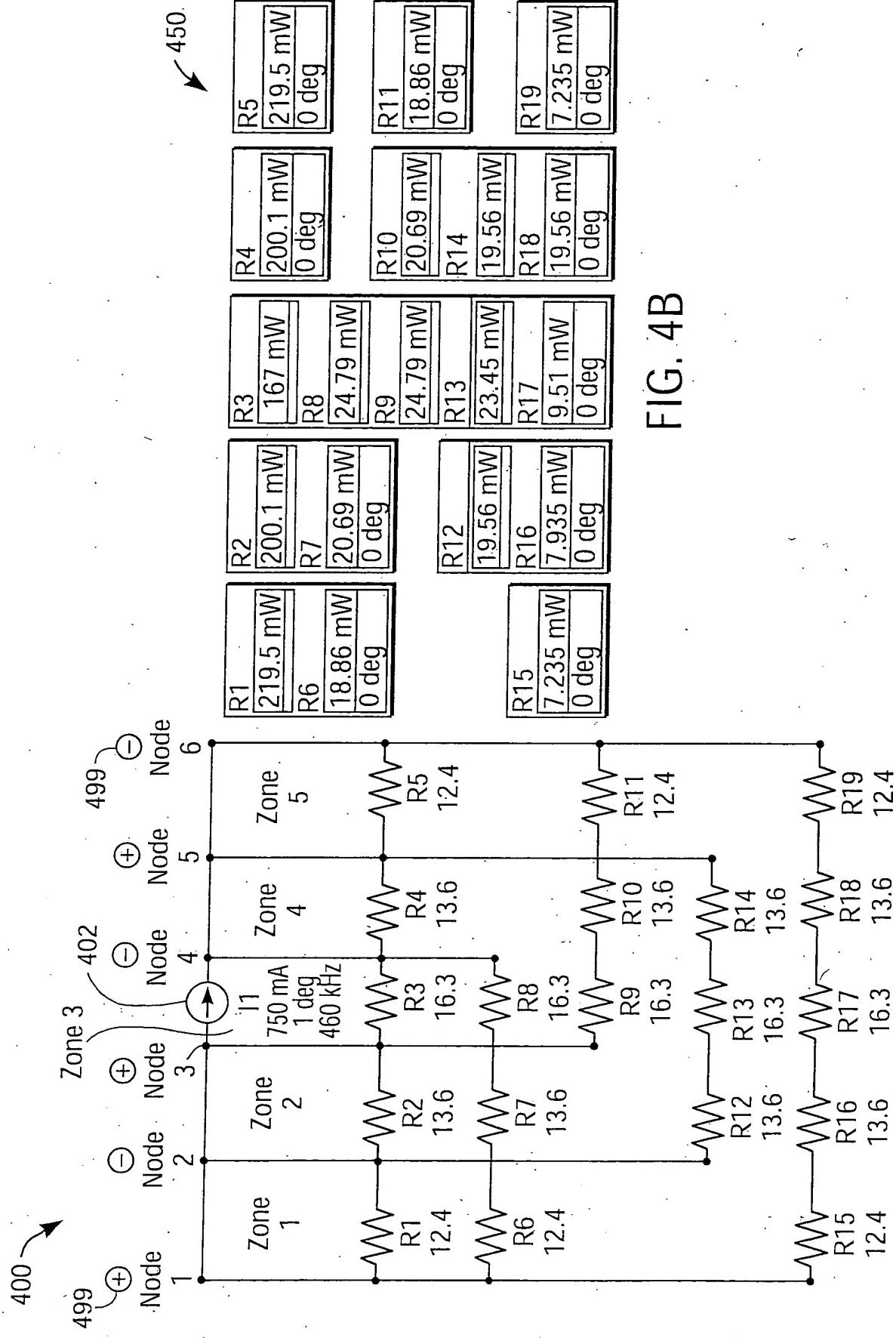


FIG. 4B

FIG. 4A

Values with Balanced Circuit  $\curvearrowleft$  480

|  | <u>Zone 1</u> | <u>Zone 2</u> | <u>Zone 3</u> | <u>Zone 4</u> | <u>Zone 5</u> |
|--|---------------|---------------|---------------|---------------|---------------|
| 219.5                                      | 200.1         | 167           | 200.1         | 219.5         |               |
| 18.86                                      | 20.69         | 24.79         | 20.69         | 18.86         |               |
| 7.235                                      | 19.56         | 24.79         | 19.56         | 7.235         |               |
|  | 7.935         | 23.45         | 7.935         |               |               |
|  |               | 9.51          |               |               |               |
|  |               |               |               |               |               |
| 482 $\curvearrowleft$ Total Power per Zone | 245.595       | 248.285       | 249.54        | 248.285       | 245.595       |

% Error per Zone 0 -1.095299 -1.606303 -1.095299 0

"Spacing" Value per Zone 12.4 13.6 16.3 13.6 12.4

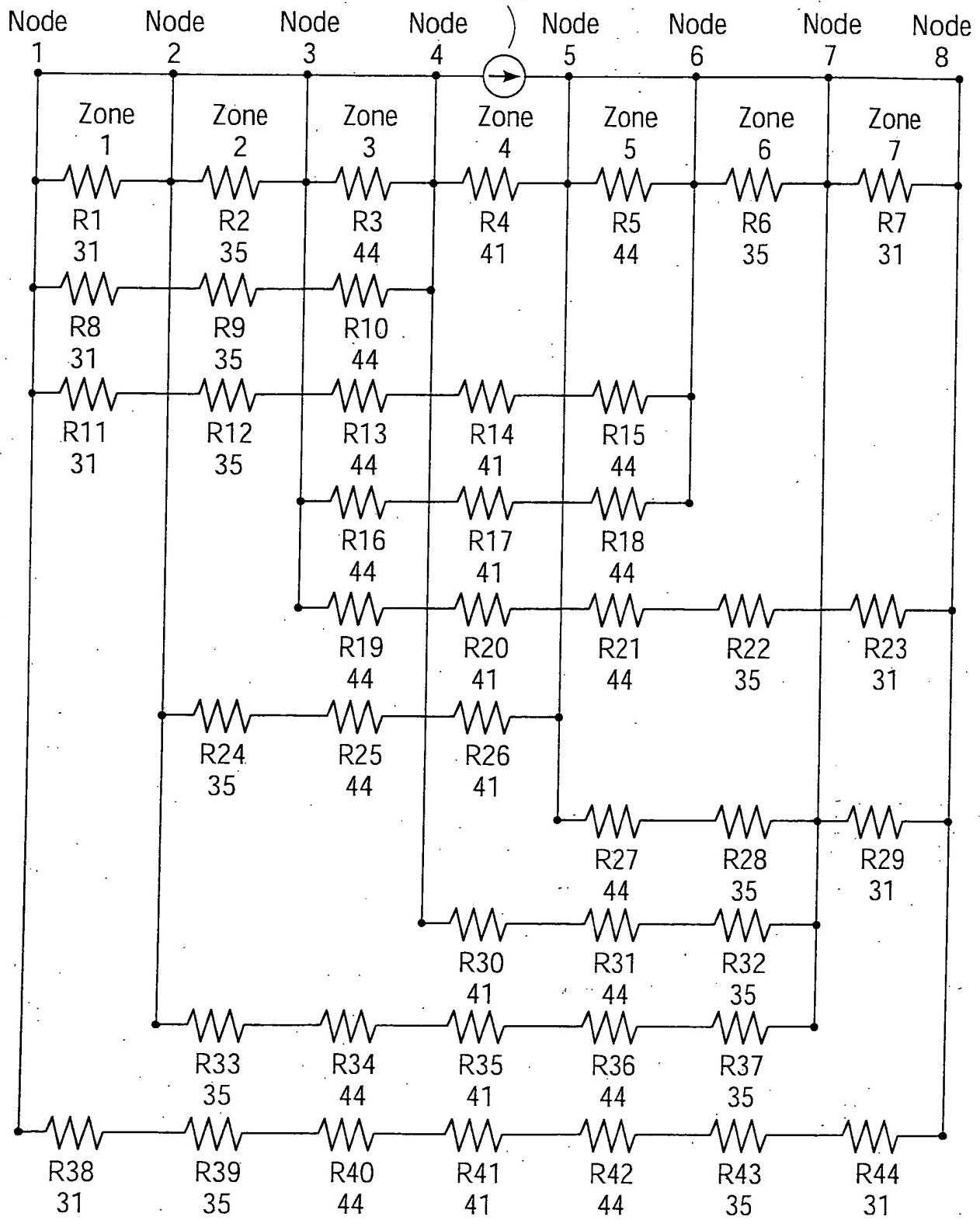
484  $\curvearrowleft$  "Spacing" Ratio per Zone 1.00 1.097 1.315 1.097 1.00

486  $\curvearrowleft$  "Spacing" Ratio per Zone 0.760736 0.834356 1 0.834356 0.760736 4.190184

FIG. 4C

1 A, 1 Deg, 460 kHz

502



500

FIG. 5A

|          |          |          |          |          |          |          |
|----------|----------|----------|----------|----------|----------|----------|
| R1       | R2       | R3       | R4       | R5       | R6       | R7       |
| 503.1 mW | 445.6 mW | 354.5 mW | 380.4 mW | 354.5 mW | 445.6 mW | 503.1 mW |
| R8       | R9       | R10      | 0 deg    | 0 deg    | 0 deg    | 0 deg    |
| 39.96 mW | 45.11 mW | 56.71 mW |          |          |          |          |
| R11      | R12      | R13      | R14      | R15      | R23      |          |
| 12.71 mW | 14.36 mW | 18.05 mW | 16.82 mW | 18.05 mW | 14.36 mW | 12.71 mW |
| 0 deg    | 0 deg    | R16      | R17      | R18      | 0 deg    | 0 deg    |
|          |          | 41.24 mW | 38.43 mW | 41.24 mW |          |          |
| R19      | R20      | R21      | R22      | R23      |          |          |
|          | 18.05 mW | 16.82 mW | 18.05 mW | 14.36 mW |          |          |
| R24      | R25      | R26      | 0 deg    | 0 deg    |          |          |
| 37.91 mW | 47.65 mW | 44.41 mW | 0 deg    | R27      | R28      | R29      |
| 0 deg    | 0 deg    |          |          | 56.71 mW | 45.11 mW | 39.96 mW |
| R30      | R31      | R32      |          |          |          |          |
|          | 44.41 mW | 47.65 mW |          |          |          |          |
| R33      | R34      | R35      | R36      | R37      | R43      | R44      |
| 13.78 mW | 17.33 mW | 16.15 mW | 17.33 mW | 13.78 mW | 8.013 mW | 7.097 mW |
| R39      | R40      | R41      | R42      | R43      | 0 deg    | 0 deg    |
| 7.097 mW | 8.013 mW | 10.07 mW | 9.387 mW | 10.07 mW | 0 deg    | 0 deg    |
| 0 deg    | 0 deg    |          |          |          |          |          |

FIG. 5B

Values with Balanced Circuit ~ 580

|                                | <u>Zone 1</u> | <u>Zone 2</u> | <u>Zone 3</u> | <u>Zone 4</u> | <u>Zone 5</u> | <u>Zone 6</u> | <u>Zone 7</u> |
|--------------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| 503.1                          | 445.6         | 354.5         | 380.4         | 354.5         | 445.6         | 503.1         |               |
| 39.96                          | 45.11         | 56.71         | 16.82         | 18.05         | 14.36         | 12.71         |               |
| 12.71                          | 14.36         | 18.05         | 38.43         | 41.24         | 45.11         | 39.96         |               |
| 7.097                          | 37.91         | 41.24         | 16.82         | 18.05         | 37.91         | 7.097         |               |
|                                | 13.78         | 18.05         | 44.41         | 56.71         | 13.78         |               |               |
|                                | 8.013         | 47.65         | 44.41         | 47.65         | 8.013         |               |               |
|                                |               | 17.33         | 16.15         | 17.33         |               |               |               |
|                                |               |               | 10.07         | 9.387         | 10.07         |               |               |
| 582 ~ Total Power per Zone     | 562.87        | 564.77        | 563.60        | 566.83        | 563.60        | 564.77        | 562.87        |
| % Error per Zone               | 0.00          | 0.34          | 0.13          | 0.70          | 0.13          | 0.34          | 0.00          |
| "Spacing" Value per Zone       | 31            | 35            | 44            | 41            | 44            | 35            | 31            |
| 584 ~ "Spacing" Ratio per Zone | 1.000         | 1.129         | 1.419         | 1.323         | 1.419         | 1.129         | 1.000         |
| 586 ~ "Spacing" Ratio per Zone | 0.704545      | 0.795455      | 1             | 0.931818      | 1             | 0.795455      | 0.704545      |

FIG. 5C

650

FIG. 6B

|    |          |     |          |
|----|----------|-----|----------|
| R1 | 219.5 mW | R3  | 195.7 mW |
| R6 | 19.21 mW | R8  | 24.17 mW |
|    | 0 deg    | R9  | 24.17 mW |
|    |          | R10 | 21.54 mW |
|    |          | R11 | 19.21 mW |
|    |          | R12 | 20.08 mW |
|    |          | R13 | 22.53 mW |
|    |          | R14 | 20.08 mW |
|    |          | R15 | 7.235 mW |
|    |          | R16 | 8.13 mW  |
|    |          | R17 | 9.124 mW |
|    |          | R18 | 8.13 mW  |
|    |          | R19 | 7.253 mW |
|    |          | R2  | 0 deg    |
|    |          | R3  | 0 deg    |
|    |          | R4  | 0 deg    |
|    |          | R5  | 0 deg    |
|    |          | R6  | 1.649 mV |
|    |          | R7  | 1.649 mV |
|    |          | R8  | 1.649 mV |
|    |          | R9  | 1.649 mV |
|    |          | R10 | 1.649 mV |
|    |          | R11 | 1.649 mV |
|    |          | R12 | 1.649 mV |
|    |          | R13 | 1.649 mV |
|    |          | R14 | 1.649 mV |
|    |          | R15 | 1.649 mV |
|    |          | R16 | 1.649 mV |
|    |          | R17 | 1.649 mV |
|    |          | R18 | 1.649 mV |
|    |          | R19 | 1.649 mV |
|    |          | R2  | 133 mA   |
|    |          | R3  | 118.7 mA |
|    |          | R4  | 105.7 mA |
|    |          | R5  | 118.7 mA |
|    |          | R6  | 113.3 mA |
|    |          | R7  | 118.7 mA |
|    |          | R8  | 113.3 mA |
|    |          | R9  | 113.3 mA |
|    |          | R10 | 113.3 mA |
|    |          | R11 | 113.3 mA |
|    |          | R12 | 113.3 mA |
|    |          | R13 | 113.3 mA |
|    |          | R14 | 113.3 mA |
|    |          | R15 | 113.3 mA |
|    |          | R16 | 113.3 mA |
|    |          | R17 | 113.3 mA |
|    |          | R18 | 113.3 mA |
|    |          | R19 | 113.3 mA |

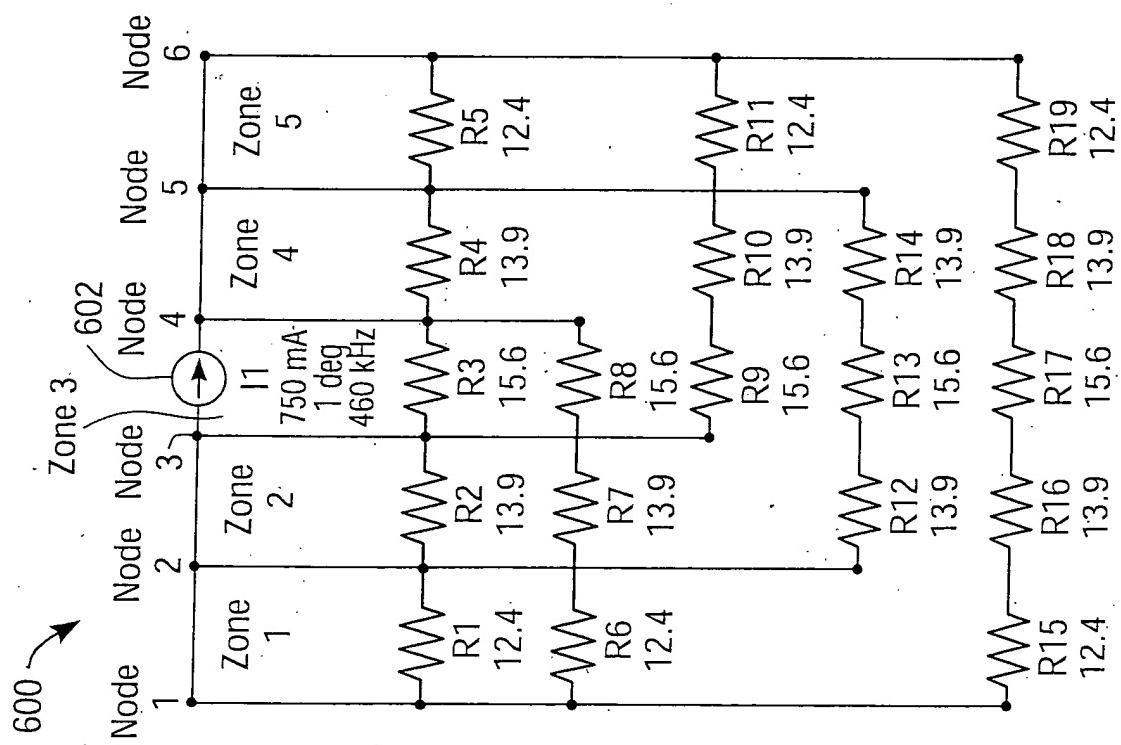


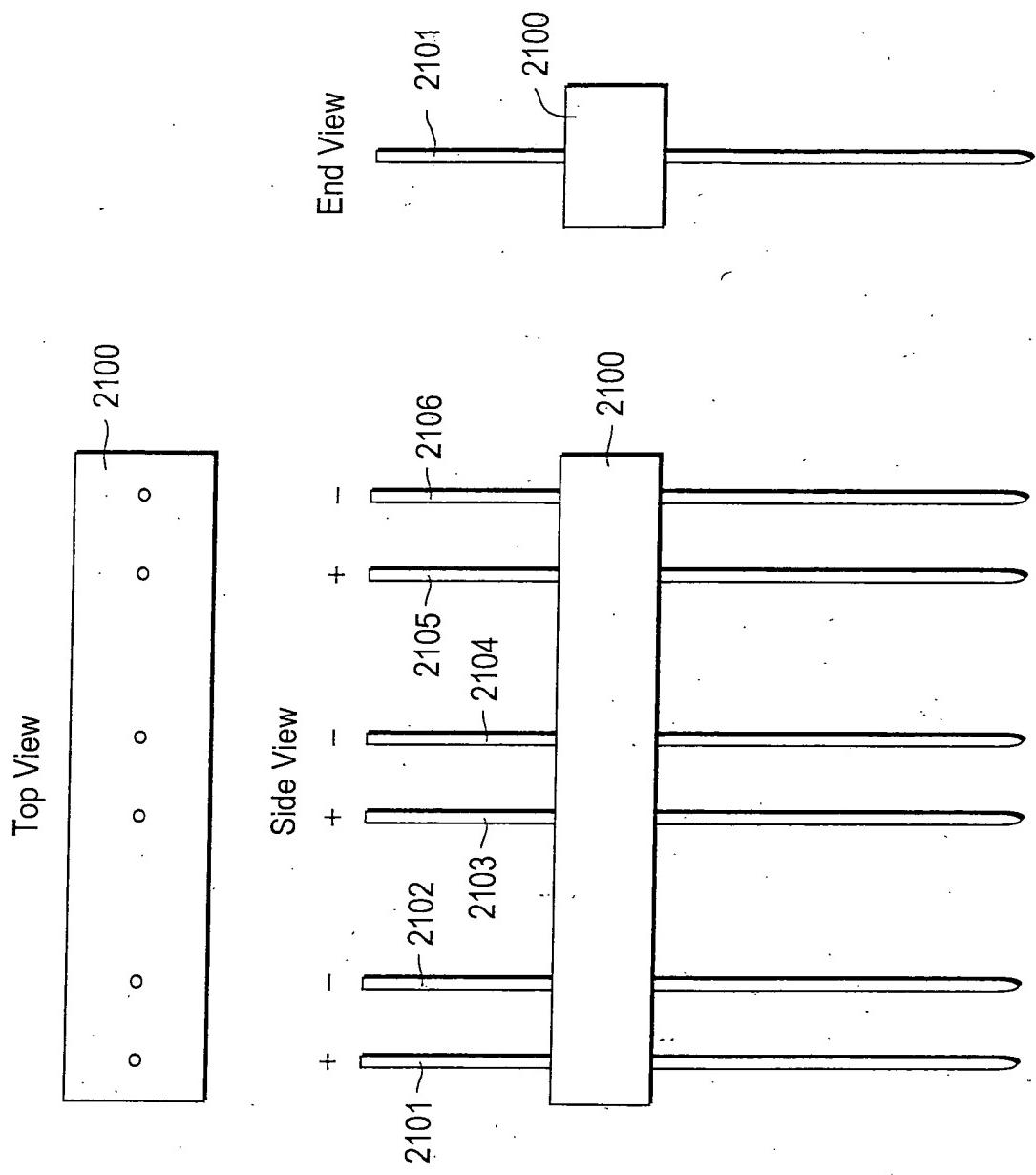
FIG. 6A

Values with Balanced Circuit  $\sim$  680

|                                     | <u>Zone 1</u> | <u>Zone 2</u> | <u>Zone 3</u> | <u>Zone 4</u> | <u>Zone 5</u> |
|-------------------------------------|---------------|---------------|---------------|---------------|---------------|
| 133                                 | 118.7         | 105.7         | 118.7         | 133           |               |
| 39.36                               | 39.36         | 39.36         | 39.36         | 39.36         |               |
| 24.18                               | 38            | 39.36         | 38            | 24.18         |               |
|                                     | 24.18         | 38            | 24.18         |               |               |
|                                     |               | 24.18         |               |               |               |
| Total Current per Zone              | 196.54        | 220.24        | 246.6         | 220.24        | 196.54        |
| "Spacing" Value per Zone            | 12.4          | 13.9          | 15.6          | 13.9          | 12.4          |
| 682 $\sim$ Current Density per Zone | 15.85         | 15.8446       | 15.80769      | 15.8446       | 15.85         |
|                                     | % Error       | 0.0           | 0.0           | 0.0           | 0.0           |
| 684 $\sim$ "Spacing" Ratio per Zone | 1.00          | 1.12          | 1.26          | 1.12          | 1.00          |
| 686 $\sim$ "Spacing" Ratio per Zone | 0.79          | 0.89          | 1.00          | 0.89          | 0.79          |

FIG. 6C

FIG. 7



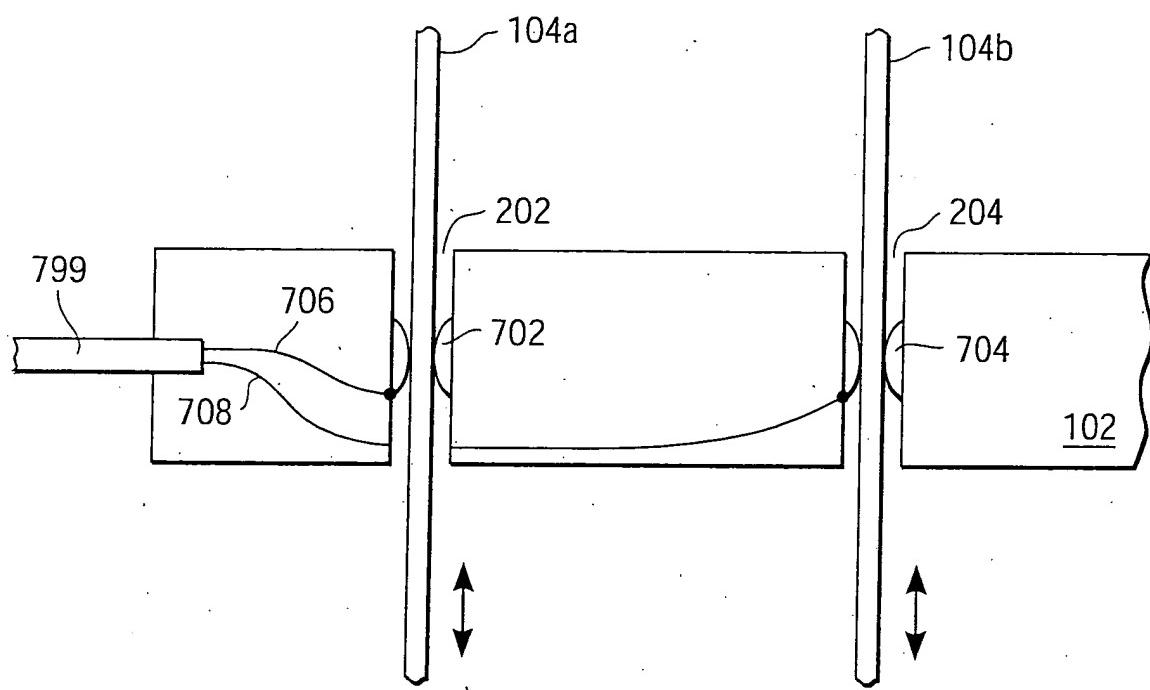


FIG. 8

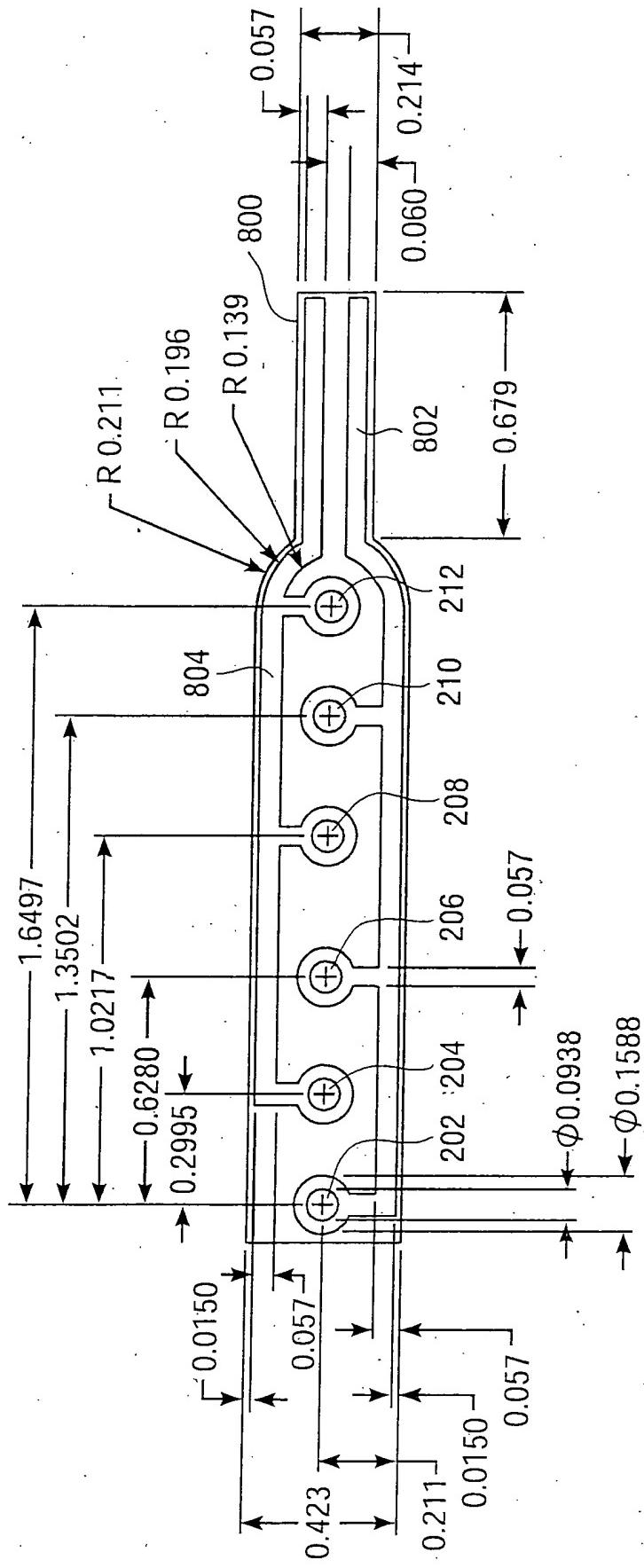


FIG. 9

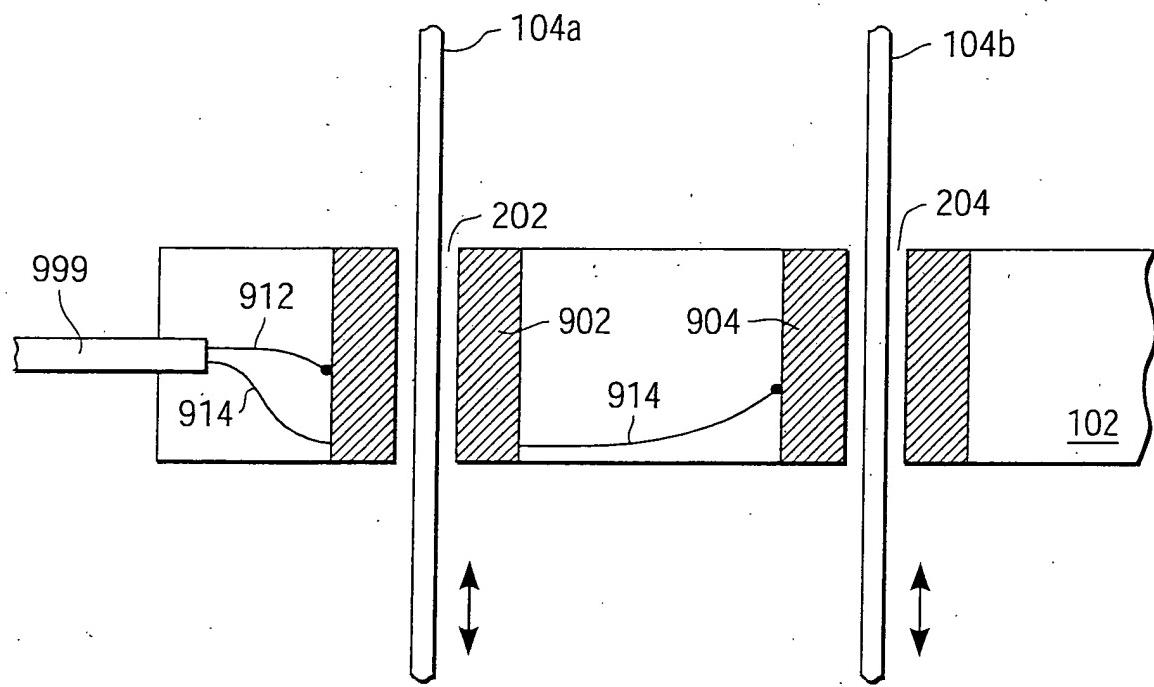


FIG. 10

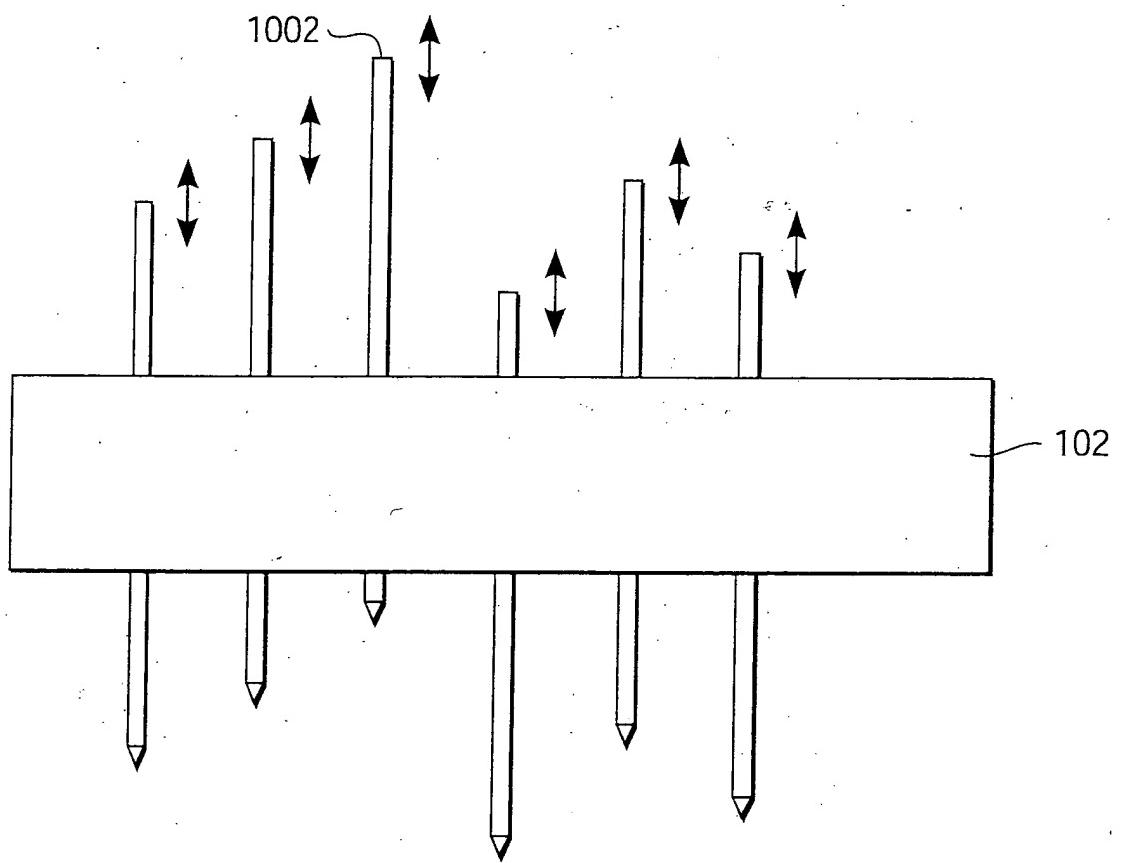


FIG. 11

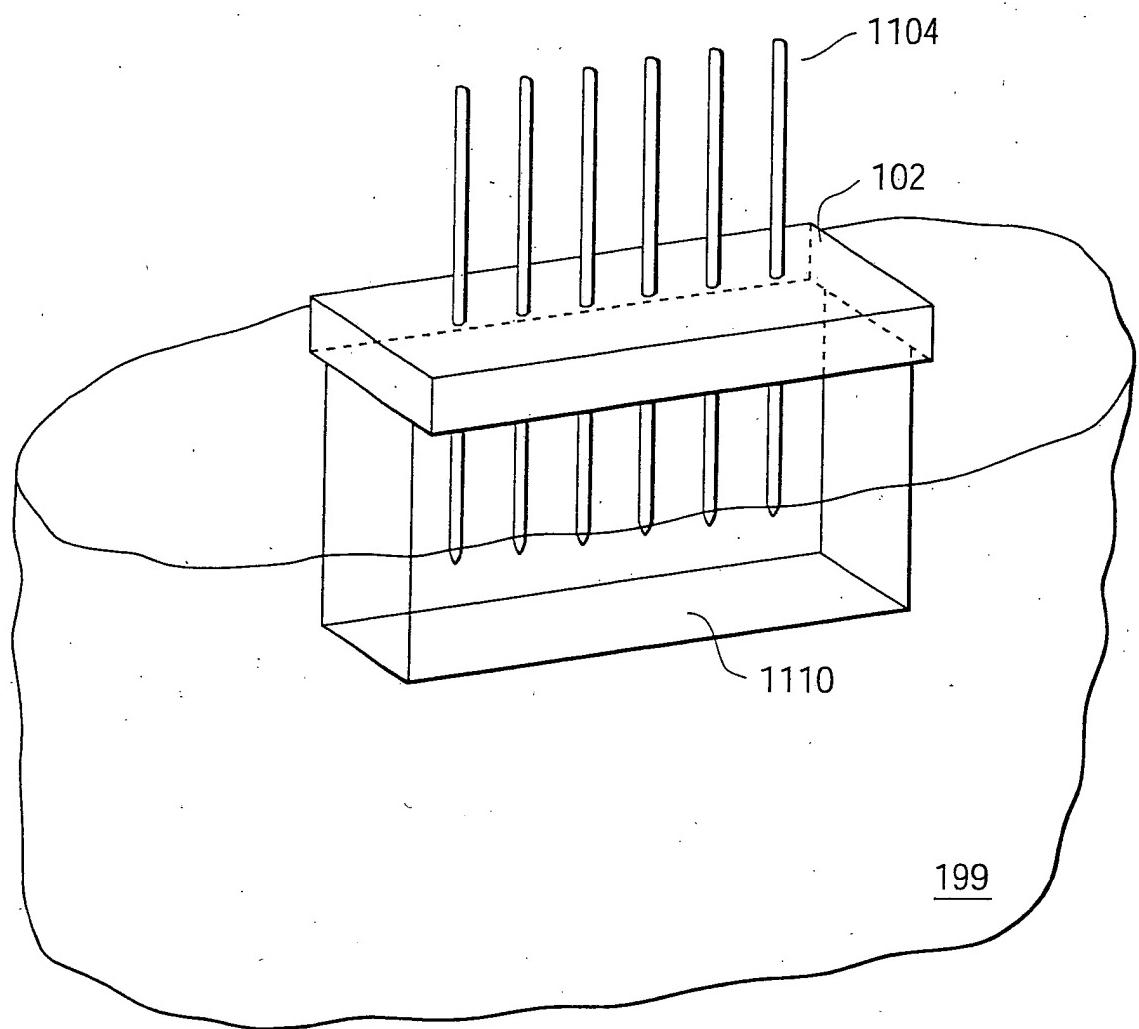


FIG. 12

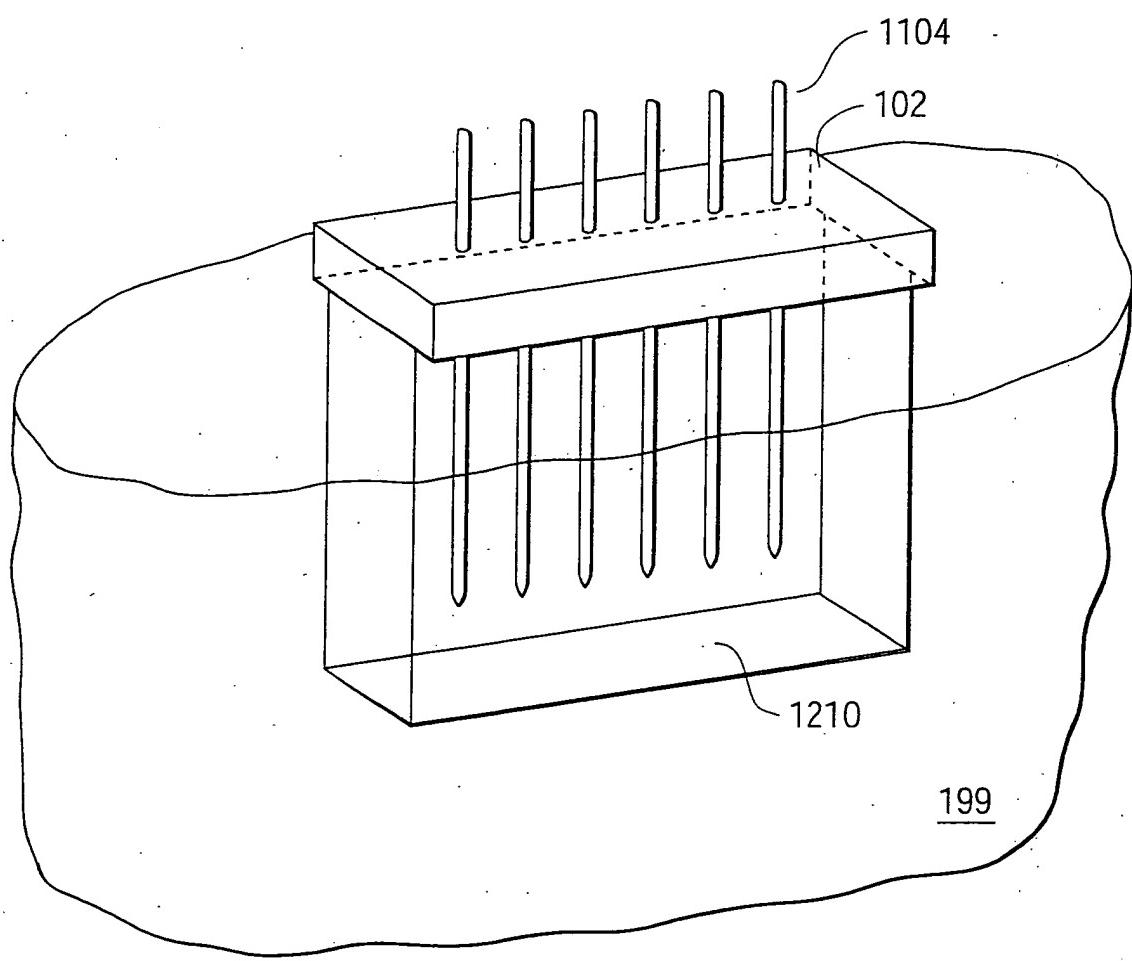


FIG. 13

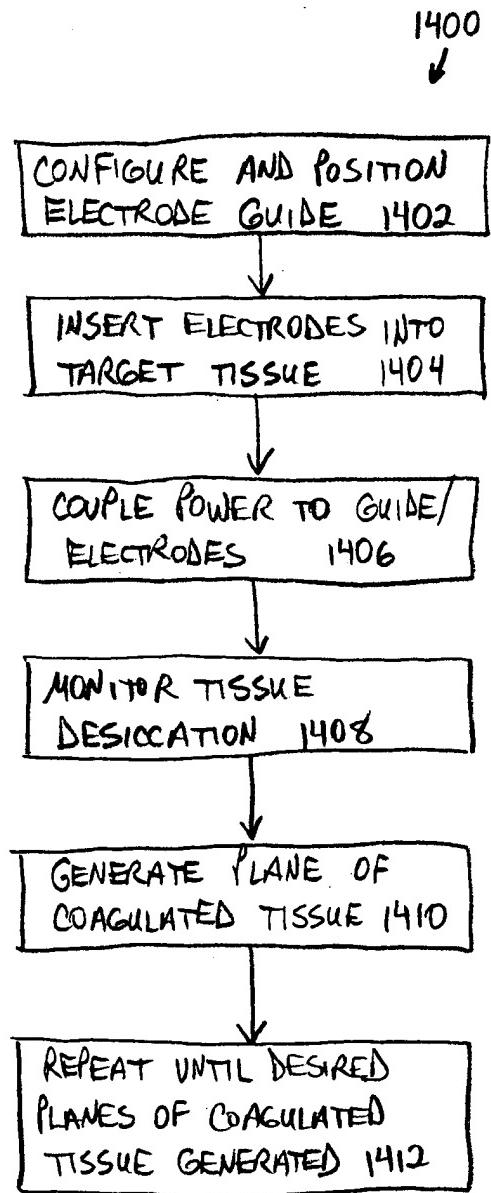


FIG. 14

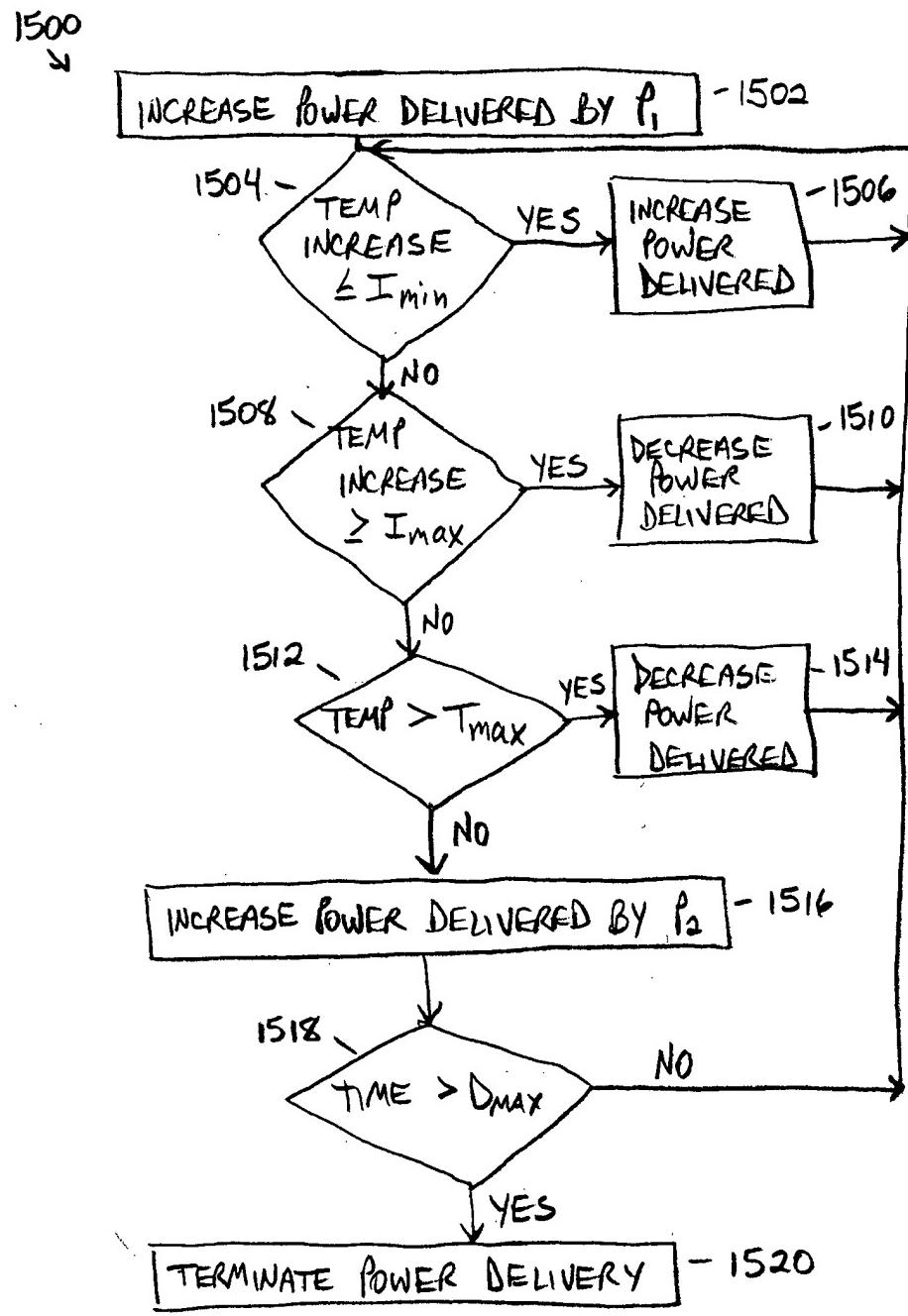


FIG. 15

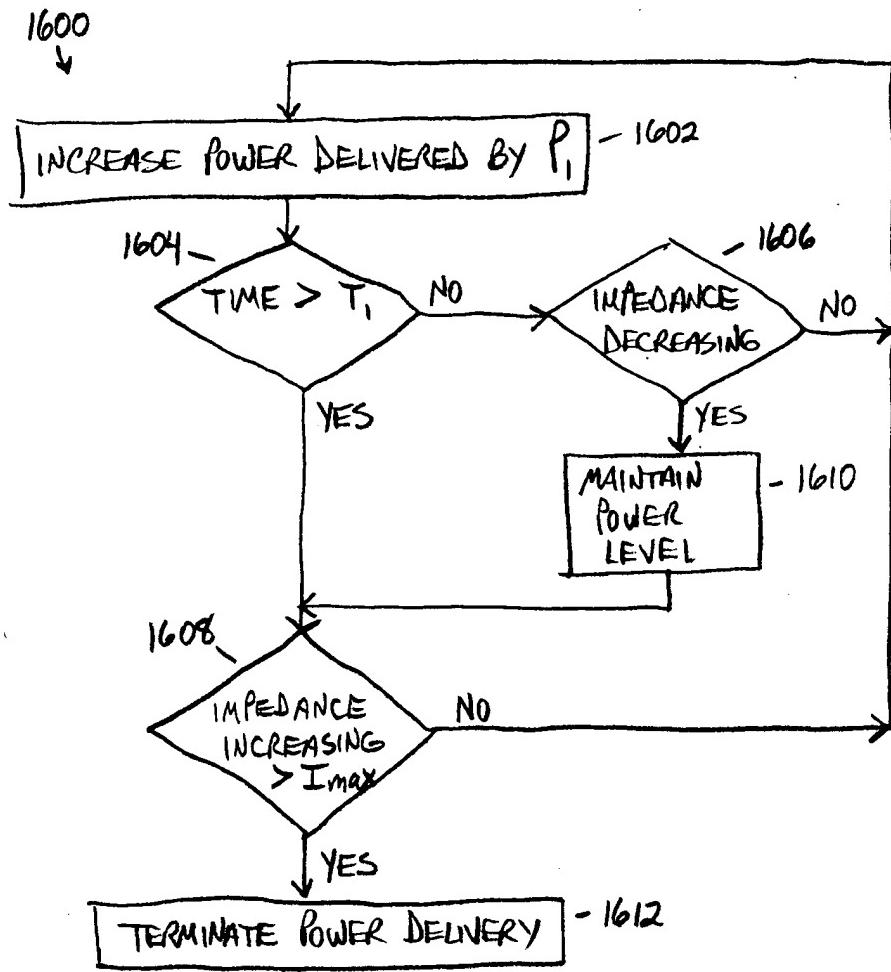


FIG. 16

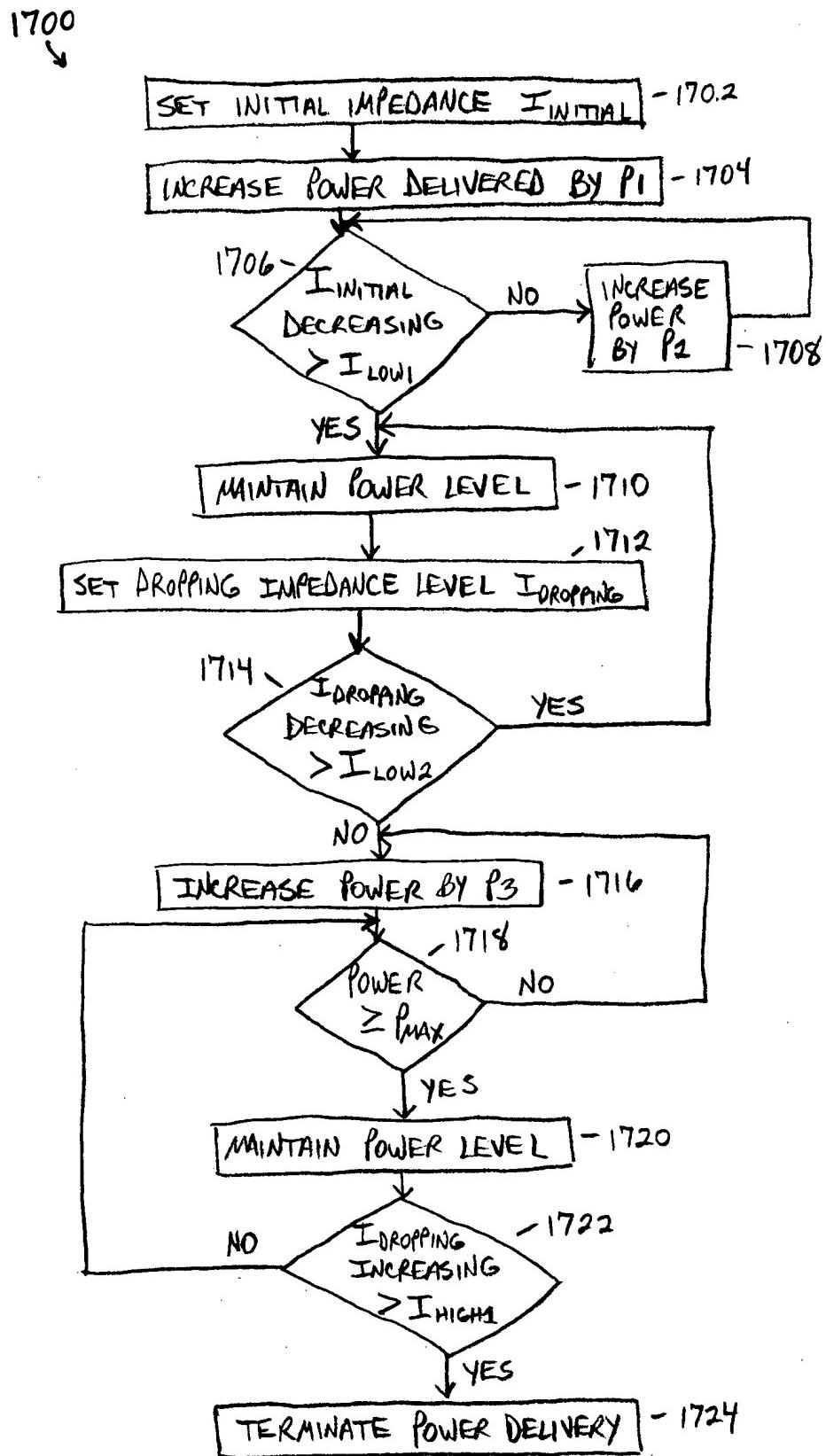


FIG. 17

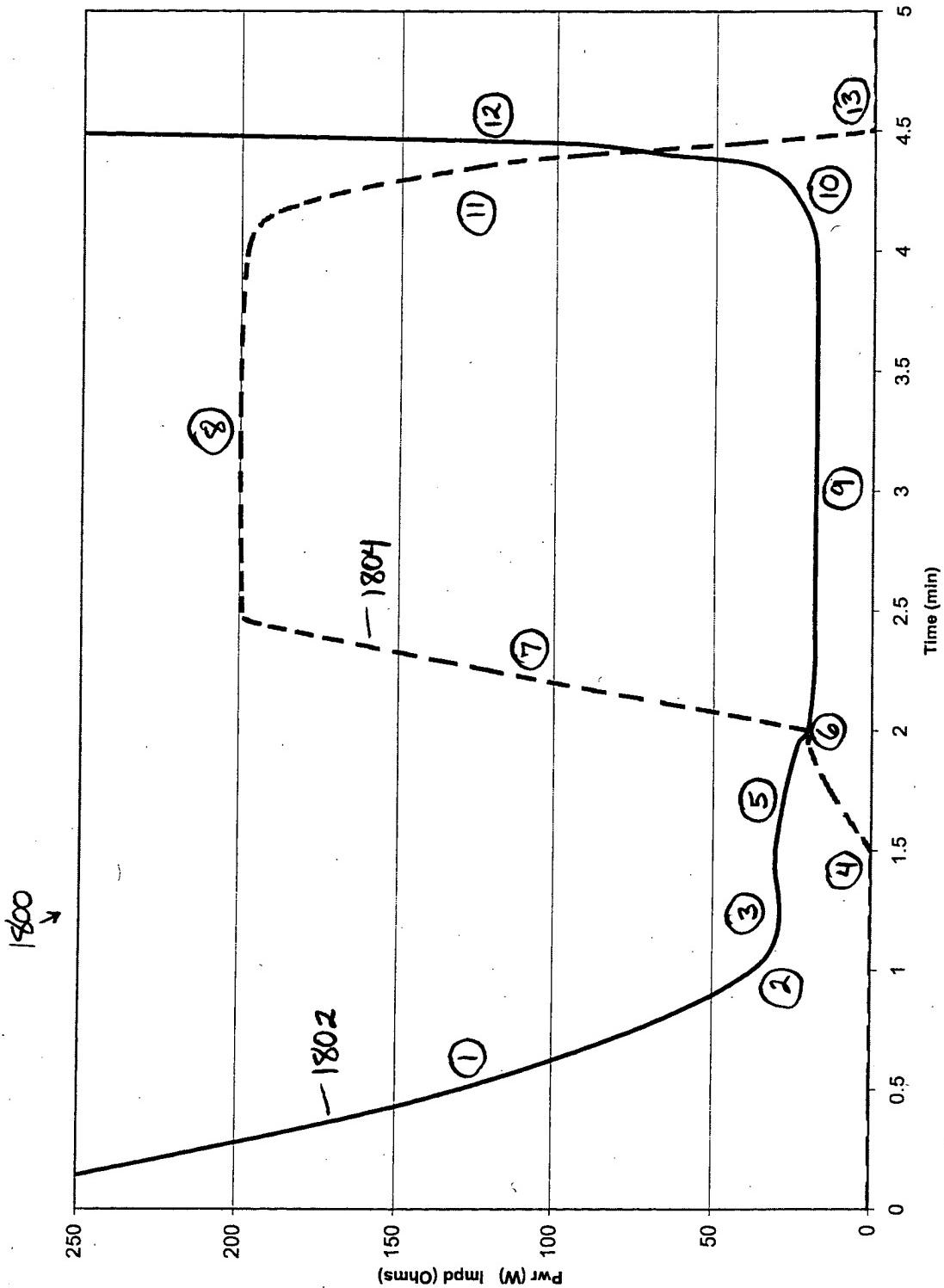


FIG. 18

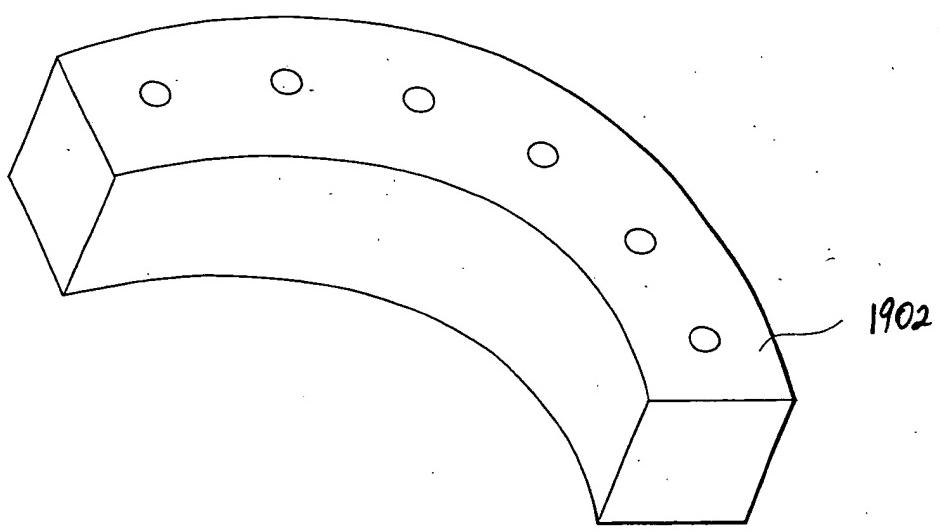


FIG. 19

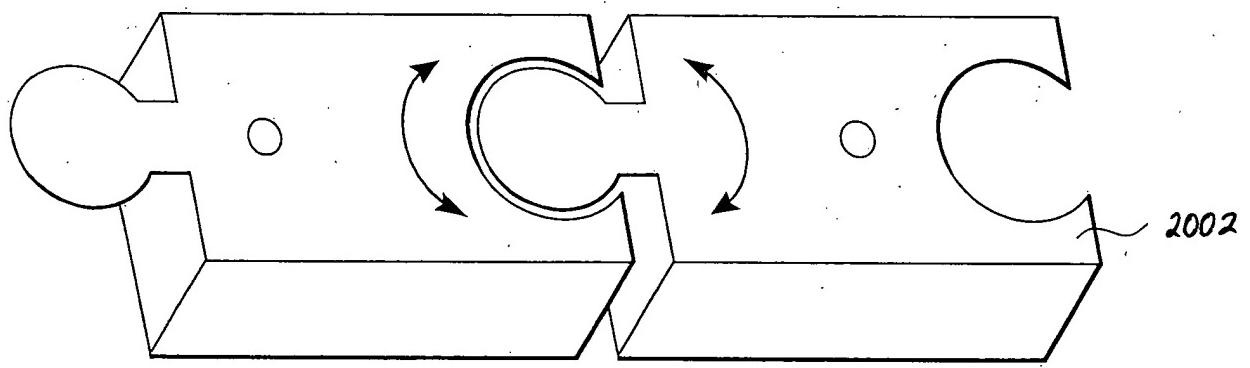


FIG. 20

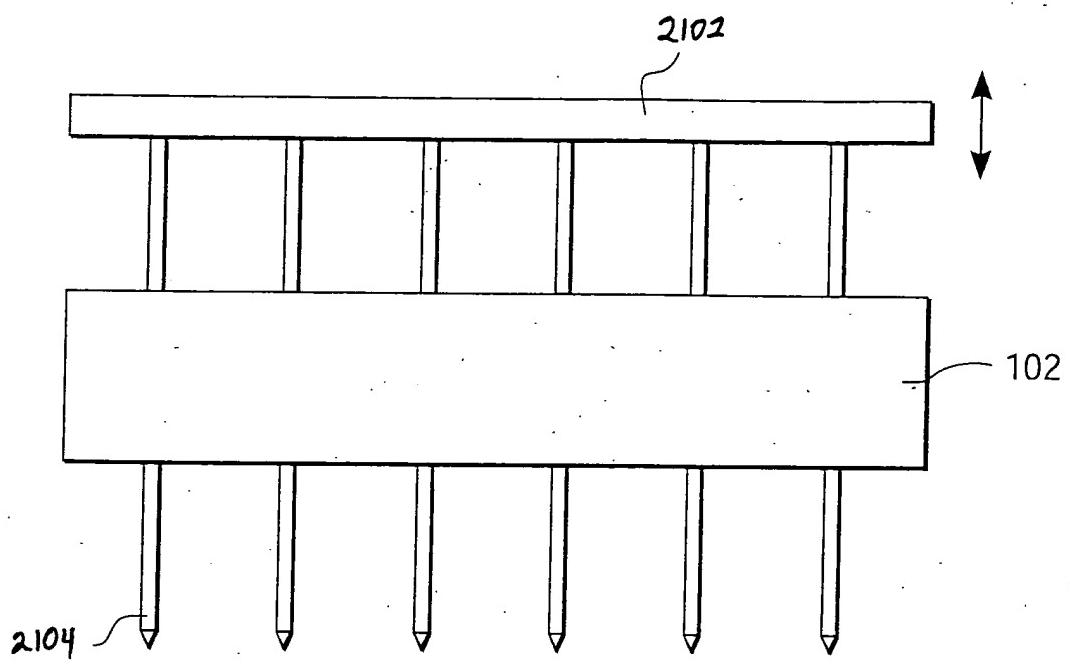


FIG. 21

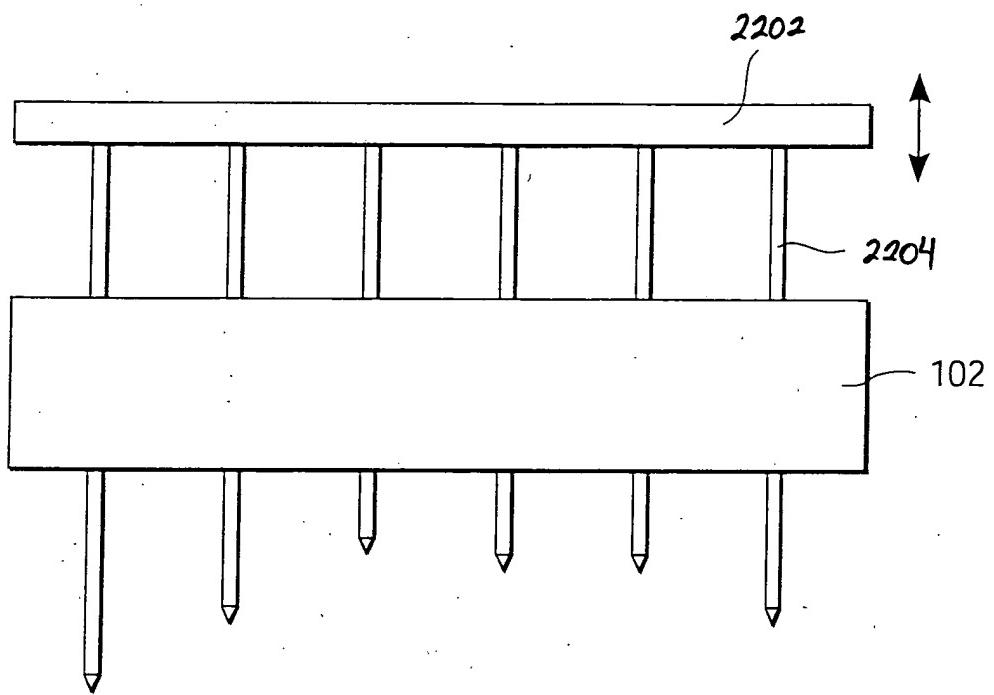


FIG. 22

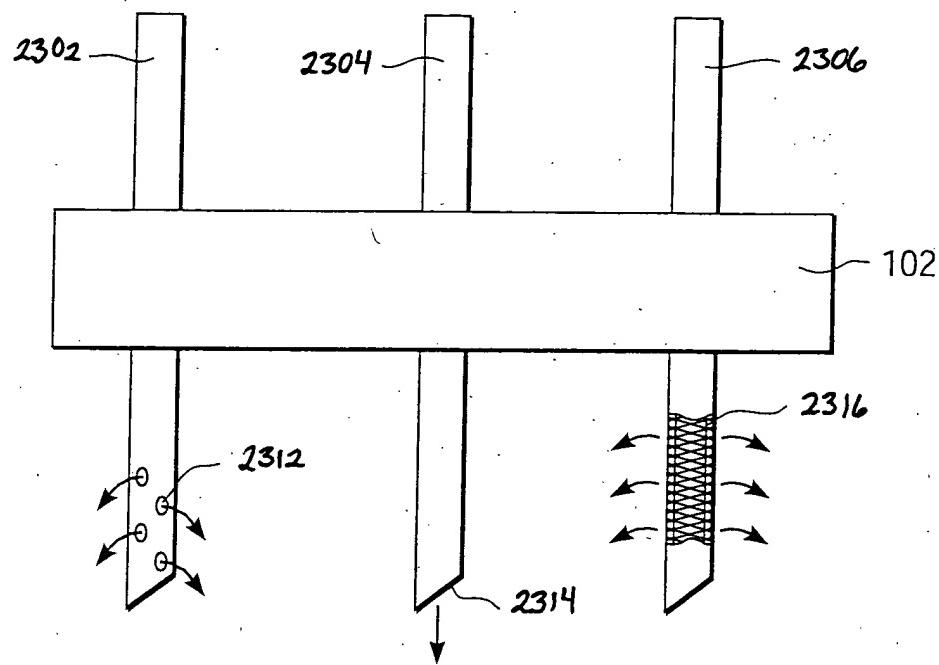


FIG. 23

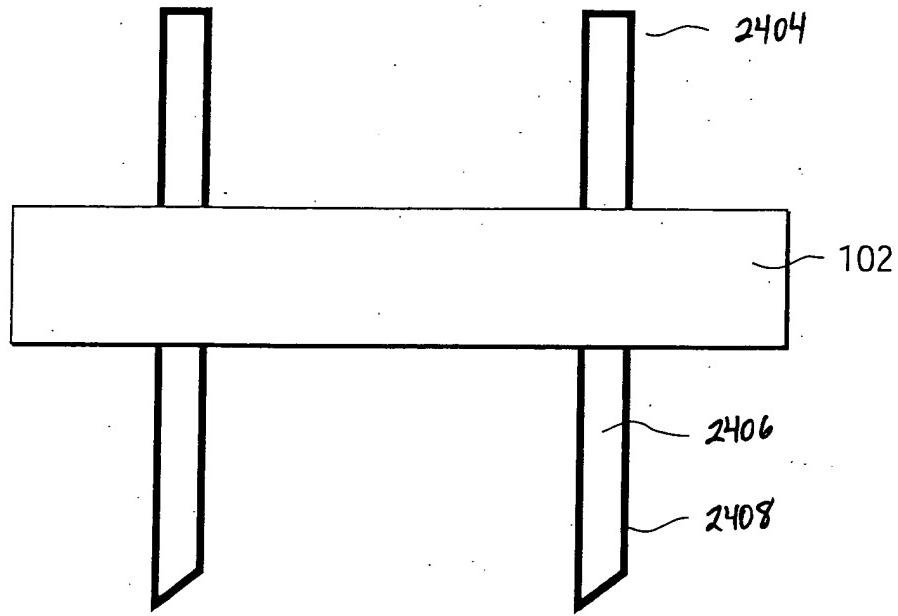


FIG. 24